

C L A I M S

1. Sheet-shaped product processable by means of flow moulding comprising carbon fibres and a thermosetting resin mixture based on radical-curable resin as the matrix, characterised in that the carbon fibres are present in the form of mats that consist substantially of fibres with lengths of more than 1 cm, the volume percentage of the carbon fibres relative to the resin being less than 70% and the carbon fibres in the mat moving freely relative to one another when the sheet-shaped product is subjected to a pressure in a mould so that, at that pressure and the employed lay-up percentage of the mould, a net end product with a homogeneous fibre distribution is formed.
2. Sheet-shaped product according to Claim 1, characterised in that the fibrous material consists entirely of carbon fibres.
3. Sheet-shaped product according to Claim 2, characterised in that the carbon fibres are present in the sheet-shaped product in the form of an isotropic or anisotropic mat.
4. Sheet-shaped product according to any one of Claims 1-3, characterised in that the surface weight of the fibrous material is between 150 and 700 g/m².
5. Sheet-shaped product according to any one of Claims 1-4, characterised in that an unsaturated polyester resin, vinyl ester resin or hybrid resin is used as the radical-curable resin.

6. Sheet-shaped product according to any one of Claims 1-5, characterised in that the radical-curable resin has an elevated viscosity as a result of thickening.
- 5 7. Process for the production of a sheet-shaped product in which fibrous material as described in Claims 1-6 is impregnated with a radical-curable resin, after which thickening of the resin to a desired viscosity takes place.
- 10 8. Process for the production of moulded parts with a tensile modulus of > 20 GPa, in particular > 40 Gpa, and preferably > 70 GPa, a tensile strength of > 200 MPa, in particular > 500 Mpa, and preferably > 900 MPa, by means of flow moulding of sheet-shaped products obtained according to Claim 7.
- 15 9. Process and/or product as substantially described and elucidated in the examples and the introduction.